# Extraction of heat treated palm oil and their stability on ß-carotene during storage

## Abstract

An investigation was carried out on the effect of different sterilization time on the β-carotene concentration of whole palm oil extract after stored for three months period. Palm fruits were collected, cleaned and sterilized for 0, 20, 40 and 60 minutes. The kernels were then stripped from the sterilized fruits to get the pulp and later the pulp was pressed using small scale expeller. The resulting puree was centrifuge at 4000 rpm for 20 minutes. The whole palm oil extract were then collected and stored at two different temperatures. A set of samples were stored at room temperature range between 28˚C - 32˚C. Another set of samples were refrigerated at a temperature between -14˚C to – 18˚C. The result showed that the highest yield was obtained at 40 minutes of sterilization with 19.9 ± 0.21% (w/w). There was a significantly difference between the degree of sterilization time in total concentration loss of β-carotenes after three months storage. 20 minutes of sterilization gave the lowest total concentration loss with 10.42 ± 1.07% towards the end of storage. Samples that stored at room temperature were observed to suffer a huge amount of loss compared to the refrigerated sample.